United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,679	06/24/2003	Noriyoshi Kurotsu	03500.017343	9528
* * * *	7590 09/26/2007 CELLA HARRER & SC	INTO	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA			DICKERSON, CHAD S	
NEW YORK, N	ORK, NY 10112		ART UNIT	PAPER NUMBER
			2625	
		•		
	,		MAIL DATE	DELIVERY MODE
,			09/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/601,679	KUROTSU, NORIYOSHI				
Office Action Summary	Examiner	Art Unit				
	Chad Dickerson	2625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period value of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on 24 July This action is FINAL. 2b) ☐ This Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro-					
Disposition of Claims						
 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) 1-17 is/are withdrawn 5) Claim(s) is/are allowed. 6) Claim(s) 18-25 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o 	n from consideration.					
Application Papers	•					
9) ☐ The specification is objected to by the Examine 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examine 10.	DE accepted or b) ☐ objected to drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2625

DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments, see page 6, filed 7/28/2007, with respect to 112 second paragraph rejections have been fully considered and are persuasive. The 112 second paragraph rejections of claims 1-6 and 11-16 have been withdrawn.
- 2. Applicant's arguments with respect to claims 1-17 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed '969 (US Pat No 7081969) in view of Gassho '626 (US Pat No 7180626). Re claim 18: Motamed '969 discloses an automatic print load balancing comprising:

an executing unit adapted to execute printing of a job having a first priority in preference to another job having a second priority that is lower than the first priority (i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job,

Art Unit: 2625

analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15) and

a changing unit adapted to detect an error in a first printer and for changing a proxy printing job for which printing is to be executed in a second printer in place of the first printer (i.e. in the system of cluster printing, errors often occur. The system is able to detect these errors and set the print job to be automatically rerouted to another printer, if the first selected printer is unable to print the print job; see figs. 1-4; col. 3, lines 52) to have a higher priority than other jobs (i.e. with the option of setting a job to fastest or background in the system, the job that is transferred to another printer can be printed before other print jobs with a background setting, if it is set to the fastest printing setting. This performs the feature of having the print job transferred to another printer having a higher priority than other jobs because of the setting of fastest already placed on the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15),

wherein said changing unit changes the proxy printing job to have the higher priority (i.e. when using the method of setting a job to be either in the fastest setting or the background setting, the print job is changed from a normal priority to a higher priority than a background print job if the print job is set to the fastest priority setting; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15).

However, Motamed '969 fails to teach wherein said changing unit moves the proxy printing job from an original queue to a queue provided for the second printer.

Art Unit: 2625

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein said changing unit moves the proxy printing job from an original queue to a queue provided for the second printer (i.e. in Gassho '626, when a printer is detected to have an error in the printing mechanism of the printer, or the print jobs are in a long queue, a certain print job with a certain priority is transferred from the queue of the printer with an error, or a large queue or jobs, to another printer with a shorter queue of print jobs so that the print job can quickly undergo a printing operation on the second printer. This performs the feature of having a print job being transferred from one queue of an original printer to another queue of a second printer; see figs. 2-5; col. 11, lines 14-67, col. 12, lines 1-67 and col. 13, lines 1-60).

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have a changing unit moves the proxy printing job from an original queue to a queue provided for the second printer in order to have a print job to be transferred from a printer having a long queue of print jobs, or in error, to another printer having a shorter queue of print jobs (as stated in Gassho '626 col. 12, lines 28-36).

Re claim 19: The teachings of Motamed '969 in view of Gassho '626 are disclosed above.

Motamed '969 discloses an apparatus according to claim 18, wherein said executing unit selects, from among jobs which have not been transmitted to a print processing unit (i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from

Art Unit: 2625

jobs that are on the print queue that have not been transmitted to the print engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), a job having a higher priority than others of those jobs (i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), reads the selected job (i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), and transmits the read job to the print processing unit (i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 5, lines 1-15).

Re claim 20: Motamed '969 discloses an automatic print load balancing comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority (i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job,

Art Unit: 2625

analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and

a changing step, of detecting an error in a first printer and changing a proxy printing job for which printing is to be executed in a second printer in place of the first printer (i.e. in the system of cluster printing, errors often occur. The system is able to detect these errors and set the print job to be automatically rerouted to another printer, if the first selected printer is unable to print the print job; see figs. 1-4; col. 3, lines 52) to have a higher priority than other jobs (i.e. with the option of setting a job to fastest or background in the system, the job that is transferred to another printer can be printed before other print jobs with a background setting, if it is set to the fastest printing setting. This performs the feature of having the print job transferred to another printer having a higher priority than other jobs because of the setting of fastest already placed on the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15),

wherein said changing step includes changing the proxy printing job to have the higher priority (i.e. when using the method of setting a job to be either in the fastest setting or the background setting, the print job is changed from a normal priority to a higher priority than a background print job if the print job is set to the fastest priority setting; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15).

However, Motamed '969 fails to teach wherein said changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer.

Art Unit: 2625

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein said changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer (i.e. in Gassho '626, when a printer is detected to have an error in the printing mechanism of the printer, or the print jobs are in a long queue, a certain print job with a certain priority is transferred from the queue of the printer with an error, or a large queue or jobs, to another printer with a shorter queue of print jobs so that the print job can quickly undergo a printing operation on the second printer. This performs the feature of having a print job being transferred from one queue of an original printer to another queue of a second printer; see figs. 2-5; col. 11, lines 14-67, col. 12, lines 1-67 and col. 13, lines 1-60).

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to the method step of having a changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer in order to have a print job to be transferred from a printer having a long queue of print jobs, or in error, to another printer having a shorter queue of print jobs (as stated in Gassho '626 col. 12, lines 28-36).

Re claim 21: The teachings of Motamed '969 in view of Gassho '626 are disclosed above.

Motamed '969 discloses a method according to claim 20, wherein said executing step includes selecting, from among jobs which have not been transmitted to a print processing unit (i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print

Art Unit: 2625

engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), a job having a higher priority than others of those jobs (i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), reading the selected job (i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), and transmitting the read job to the print processing unit (i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 5, lines 1-15).

Re claim 22: Motamed '969 discloses an automatic print load balancing, the method comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority (i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job,

Art Unit: 2625

analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and

a changing step, of detecting an error in a first printer and changing a proxy printing job for which printing is to be executed in a second printer in place of the first printer (i.e. in the system of cluster printing, errors often occur. The system is able to detect these errors and set the print job to be automatically rerouted to another printer, if the first selected printer is unable to print the print job; see figs. 1-4; col. 3, lines 52) to have a higher priority than other jobs (i.e. with the option of setting a job to fastest or background in the system, the job that is transferred to another printer can be printed before other print jobs with a background setting, if it is set to the fastest printing setting. This performs the feature of having the print job transferred to another printer having a higher priority than other jobs because of the setting of fastest already placed on the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15),

wherein said changing step includes changing the proxy printing job to have the higher priority (i.e. when using the method of setting a job to be either in the fastest setting or the background setting, the print job is changed from a normal priority to a higher priority than a background print job if the print job is set to the fastest priority setting; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15).

However, Motamed '969 fails to teach wherein said changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer.

Art Unit: 2625

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein said changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer (i.e. in Gassho '626, when a printer is detected to have an error in the printing mechanism of the printer, or the print jobs are in a long queue, a certain print job with a certain priority is transferred from the queue of the printer with an error, or a large queue or jobs, to another printer with a shorter queue of print jobs so that the print job can quickly undergo a printing operation on the second printer. This performs the feature of having a print job being transferred from one queue of an original printer to another queue of a second printer; see figs. 2-5; col. 11, lines 14-67, col. 12, lines 1-67 and col. 13, lines 1-60).

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to the method step of having a changing step includes moving the proxy printing job from an original queue to a queue provided for the second printer in order to have a print job to be transferred from a printer having a long queue of print jobs, or in error, to another printer having a shorter queue of print jobs (as stated in Gassho '626 col. 12, lines 28-36).

Re claim 23: The teachings of Motamed '969 in view of Gassho '626 are disclosed above.

Motamed '969 discloses a program according to claim 22, wherein said executing step includes selecting, from among jobs which have not been transmitted to a print processing unit (i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print

Art Unit: 2625

engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), a job having a higher priority than others of those jobs (i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), reading the selected job (i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), and transmitting the read job to the print processing unit (i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 5, lines 1-15).

Re claim 24: Motamed '969 discloses an automatic print load balancing comprising:

an executing unit adapted for executing printing of a job having a first priority and placed in a queue in preference to another job placed in the queue and having a second priority that is lower than the first priority (i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and

Art Unit: 2625

printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15);

a proxy unit adapted for executing proxy printing such that a job for a first printer is printed in a second printer in place of the first printer (i.e. in the system of cluster printing, errors often occur. The system is able to detect these errors and set the print job to be automatically rerouted to another printer, if the first selected printer is unable to print the print job. Therefore, the system performs the feature of the proxy unit above; see figs. 1-4; col. 3, lines 52); and

a changing unit adapted for changing the job for the proxy printing by said proxy unit to have a higher priority (i.e. with the option of setting a job to fastest or background in the system, the job that is transferred to another printer can be printed before other print jobs with a background setting, if it is set to the fastest printing setting. This performs the feature of having the print job transferred to another printer having a higher priority than other jobs because of the setting of fastest already placed on the print job. Therefore, the above feature is performed by the system; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15),

wherein said changing unit changes the job to have the higher priority (i.e. when using the method of setting a job to be either in the fastest setting or the background setting, the print job is changed from a normal priority to a higher priority than a background print job if the print job is set to the fastest priority setting; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15).

Art Unit: 2625

However, Motamed '969 fails to teach wherein said changing unit moves the job from an original queue to a queue provided for the second printer.

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein said changing unit moves the job from an original queue to a queue provided for the second printer (i.e. in Gassho '626, when a printer is detected to have an error in the printing mechanism of the printer, or the print jobs are in a long queue, a certain print job with a certain priority is transferred from the queue of the printer with an error, or a large queue or jobs, to another printer with a shorter queue of print jobs so that the print job can quickly undergo a printing operation on the second printer. This performs the feature of having a print job being transferred from one queue of an original printer to another queue of a second printer; see figs. 2-5; col. 11, lines 14-67, col. 12, lines 1-67 and col. 13, lines 1-60).

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have a changing unit moves the job from an original queue to a queue provided for the second printer in order to have a print job to be transferred from a printer having a long queue of print jobs, or in error, to another printer having a shorter queue of print jobs (as stated in Gassho '626 col. 12, lines 28-36).

Re claim 25: The teachings of Motamed '969 in view of Gassho '626 are disclosed above.

Motamed '969 discloses a system according to claim 24, wherein said executing unit selects, from among jobs which have not been transmitted to a print processing unit (i.e.

Art Unit: 2625

in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), a job having a higher priority than others of those jobs (i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), reads the selected job (i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15), and transmits the read job to the print processing unit (i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67, lines 1-15).

Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 6. Yacoub '692 (US Pub No 2003/0011805) discloses directing print jobs in a network printing system. In this invention, when a printer is detected to be in error because of lack of resources (i.e. paper or toner) the system automatically searches for a printer that matches the print job's criteria for printing. Each printer has a queue that

Art Unit: 2625

has stored jobs and the transfer of a print job to another printer involves transferring a print job from an original printer's queue to another printer's queue for printing on the other printer.

Applicant's amendment necessitated the new ground(s) of rejection presented in 7. this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

Art Unit: 2625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/ Chad Dickerson September 17, 2007

> AUNG S. MOE SUPERVISORY PATENT EXAMINER

0110